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CAUSES AND PROGRESS OF INFLATION

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THE causes of the inflation¹ which the country has experienced since 1913 may be divided into two groups:

(1) Non-war causes or causes that presumably would have been operative had there been no war and; (2) war causes. This division is a convenient one for purposes of analysis and exposition, but, as for most classifications in the field of economics, the line of demarkation is not a sharp one.

From 1896 to 1913 the United States, like all other gold standard countries, went through a period of inflation. In those 17 years the country's physical volume of business increased about 117 per cent.² The country's stock of monetary gold increased 212 per cent, the amount of money in circulation, 123 per cent; and bank deposits, subject to check, 201 per cent.³ There is evidence of substantial increase during the same period both in the rate of money and deposit turnover.⁴

¹ Two years ago in an article on Inflation written for the *American Economic Review*, the writer defined inflation as follows: "Without attempting to harmonize the various conflicting views, nor to give a precise and formal definition of inflation, we may note that there is one idea common to most uses of the word, namely, the idea of a supply of circulating media in excess of trade needs. It is the idea of redundancy of money or circulating credit or both, a redundancy that results in rising prices. . . . More specifically, inflation occurs when, at a given price level, a country's circulating media—cash and deposit currency—increase relatively to trade needs." It is in the above sense that the term is used in the present paper. "Inflation," *American Economic Review*, June 1918, p. 247.

² The nine indices of the physical growth of business (excluding the indices expressed in dollar values used in my *Money and Prices*, pp. 130-131) showed an average increase from 1896 to 1908 of 93 per cent. Irving Fisher's Index of the physical volume of trade increased 26 per cent from 1908 to 1913. Together these indices showed an increase from 1896 to 1913 of 117 per cent. Irving Fisher's index alone showed an increase of 138 per cent for the same period.

³ Irving Fisher's figures are used for bank deposits, *American Economic Review*, June, 1915, chart facing page 408.

⁴ *Ibid.*

Here was an expansion of currency and circulating credit far in excess of the growth in the physical volume of business—an expansion due chiefly to the great increase in the world's gold production, an increase of which the United States received a continually growing share. Under such circumstances a great rise in the country's price level was to be expected. What took place is familiar to all. Our American wholesale price level rose about 50 per cent during the 17 years from 1896 to 1913, representing an average annual increase of about 3 per cent, measured arithmetically, and about 2.4 per cent, measured geometrically.

The forces that pushed up the price level during the period 1896 to 1913 were still operating when the European War broke out. They presumably would have continued to push up prices for some time had there been no war, and they exerted an upward pressure on the price level during the war itself. While the world's annual gold production declined somewhat during the later years of the war, the amounts produced none the less continued to be large, as compared with the average for any considerable number of previous years, and they were being poured into a reservoir of gold whose level had been for many years a rising one.

The second class of non-war causes leading to inflation during the years 1913 to 1920 were those growing out of the reorganization of our American banking system. Here it is difficult to distinguish between non-war and war causes because it is impossible to determine to what extent, if any, some of the organic changes made in our banking system during the last six years should be attributed to war causes. An important instance of this kind is the federal reserve amendment of June 21, 1917, providing for a further reduction in legal reserves of member banks and discontinuing entirely all cash-in-vault legal reserve requirements for these banks. Would this change have been made had it not been for the war? It is very doubtful.

At any rate, important reductions in legal reserve requirements were made by our federal reserve legislation prior to the outbreak of the war in Europe and with no reference to such a contingency. Our banking system had been cumbersome and our use of reserves exceedingly wasteful. Abnormally large reserves had been needed to support a given volume of deposit

WORLD'S GOLD PRODUCTION

	Ounces	General Index Number (average 1895-1904 = 100)	Special Index Number (1913 = 100)
1895	9,615	73.1	
1896	9,784	74.4	
1897	11,421	86.8	
1898	13,878	105.6	
1899	14,838	112.8	
1900	12,315	93.6	
1901	12,626	96.0	
1902	14,355	109.2	
1903	15,853	120.5	
1904	16,804	127.8	
1905	18,396	139.9	
1906	19,471	148.1	
1907	19,977	151.9	
1908	21,422	162.9	
1909	21,965	167.0	
1910	22,022	167.5	
1911	22,348	170.0	
1912	22,549	171.5	
1913	22,250	169.2	100
1914	21,240	166.8	95.4
1915	22,675	172.5	102.
1916	21,970	167.6	98.6
1917	20,290	154.3	91.0
1918	18,427	140.1	82.7
1919	17,664 (est.)	134.3	79.4

credit, because our reserves were widely scattered and immobile and because our circulating bank credit was woefully inelastic. The remedying of these evils through the federal reserve system made possible and desirable the release from reserves of large quantities of money with corresponding reductions in reserve ratios. Under normal conditions this release would have resulted in heavy net exportations of gold.

An idea of the extent of the reduction in ultimate legal reserve requirements contemplated by the federal reserve act at the time of its enactment may be obtained by asking ourselves how the law would have affected the ultimate legal cash reserves held against deposits in the case of three national banks: one in a central reserve city, one in a reserve city, and one in a country bank city. It is assumed that each bank had at both dates demand deposits of \$1,200,000, time deposits (payable after 30 days' notice) of \$300,000, and a national bank note circulation of \$100,000. The situation in 1913, and

the situation as it ultimately would have been had the legal reserve requirements of the original act gone into full effect, are shown in the following table:

ULTIMATE LEGAL CASH RESERVE

	1913. ¹		After federal reserve act of 1913 should have gone into full effect.	
	Amount.	Per cent. of deposits.	Amount. ²	Per cent. of deposits.
Central Reserve City Bank . .	\$375,000	25	\$156,755	10.5
Reserve City Bank	234,375	15.6	132,400	8.8
Country Bank	111,094	7.4	108,018	7.2
All three banks . . .	\$720,469	16.0	\$397,173	8.8

In the central reserve city bank it will be observed the reduction would have been from a reserve representing 25 per cent of deposits to one representing 10½ per cent. In the reserve city bank the corresponding reduction would have been from 15.6 per cent to 8.8 per cent, and in the country bank from 7.4 per cent to 7.2 per cent. The figures show an average reserve for the three banks of 16 per cent before the federal reserve act was passed and show that the average would have been 8.8 per cent, had the reserve requirements of the act in its original form gone into full operation. Some idea of how important this reduction would have been will be obtained when it is noticed that the net deposits in 1913 (August 9th) were \$1,619 millions for all central reserve city banks, \$1,882 millions for all reserve city banks, and \$3,596 millions for all country banks. The total net deposits for the three groups of banks combined were \$7,097 millions. A reduction in ultimate legal cash reserves from 16.0 per cent to 8.8 per cent on the total net deposits in 1913 would have released \$511 millions

¹ In computing reserve amounts fractional parts of a dollar have been ignored.

² That part of the legal reserve that the law permitted to be held at the bank's option either as cash in vault or as a deposit with the federal reserve bank, it has been assumed would have been held half in each form.

of reserve money which, taking an 8.8 per cent average reserve as the ultimate legal reserve base, would have been adequate for a deposit expansion of over \$5,800 millions. Under peace conditions of course an expansion of such dimensions in deposit currency would have been impossible, for a large part of the released reserves would have left the country in the form of heavy gold exports. Some of this gold would have gone into the arts. The gold embargo later prevented the exportation of gold except in very small quantities, but that is a war measure and will be considered later. It may be claimed that a reduction in legal reserve requirements is a very different thing from a reduction in actual cash reserves. No one, however, can study the bank reserve experiences of the United States of recent years without being impressed with the close connection between our legal requirements and our actual reserves. Actual reserves in the United States usually stand very close to the legal minima.¹ The program laid down in the federal reserve act as originally passed, for the gradual modification of legal reserves until they should reach the limits given above after a three-year period, was never fully carried out. Before that time the war struck us and under the pressure of war demands legal reserves were reduced to a much further extent than was provided for in the act of 1913. Those changes will be considered later. The amount of inflation that would have resulted from the carrying through of the reserve reduction provisions of the original federal reserve act cannot be attributed to the war, although the war probably would have expedited the process of inflation through taking up the slack much more quickly than otherwise would have been the case.

The other non-war causes of inflation call for only a brief consideration. The first is the introduction of the new federal reserve notes. In 1913 the most important item in our paper money circulation was the gold certificate which was backed dollar for dollar by gold and of which the circulation amounted to almost exactly one billion dollars. The new federal reserve note called for a legal minimum gold reserve of

¹ See *Annual Report of the Comptroller of the Currency, 1913*, pp. 278-281; also O. M. W. Sprague, *Crises Under the National Banking System*, p. 216.

40 per cent. Even before our entrance into the war, the federal reserve bank had adopted the policy of withholding gold certificates from circulation and putting in their places federal reserve notes. This policy strengthened the gold position of the federal reserve banks and put into circulation a more elastic form of paper money. It none the less was a cause of inflation; for it substituted in active circulation, a form of paper money requiring a 40 per cent legal reserve for one requiring 100 per cent.

Had it not been for the war many years might have elapsed before the actual reserves against federal reserve notes were reduced to the legal minimum of 40 per cent, but it is a fair guess, in the light of American experiences with legal reserve minima, that the time would ultimately have come. A billion dollars of gold certificates, if withdrawn from circulation and used as a 40 per cent reserve for federal reserve notes, would permit a net currency expansion of \$1,500 millions. Under normal conditions the effect of such a policy on prices would have been small for the policy would have forced gold out of the country and thereby the resulting inflation would have been spread out rather thinly over the gold standard countries of the entire world. Here again, however, we encounter the gold embargo induced by the war, which entirely changed the situation.

Other non-war causes of inflation are found in the development of the clearing and collection system of the federal reserve banks and in the establishment of the gold settlement fund. These developments represent some of the most creditable features of our American banking history and the federal reserve authorities deserve high praise for what they have accomplished in this connection. None the less these much needed improvements contributed to inflation. They have increased the efficiency of our currency and circulating credit and enabled the average dollar to do more money work than before. They have reduced the wasteful habit of routing checks, cheapened domestic exchange operations, made possible the transfer from one part of the country to another of many millions of dollars by means of book credits that would otherwise have required the shipment of currency, and they have therefore reduced the average amount of money continually

tied up in transit. To increase the efficiency of the dollar in these ways is to increase the effective currency supply as truly as to increase the number of dollars. The dollars turn over more rapidly and therefore do more money work.

Most of these non-war causes of inflation represent improvements in our circulation and banking systems. Had it not been for the war the inflation incident to these improvements would have made itself felt more slowly and, being spread out over the whole gold standard world, would probably not have been very serious in its permanent price-lifting effects. The war aggravated these inflationary influences and added many new ones of its own. Let us now turn to the distinctive war causes of inflation.

Although without the war we probably should have experienced heavy losses of gold on net balance during the early period of the operation of the federal reserve act, the war itself reversed this situation and brought us, prior to our own entrance as a belligerent, the largest flood of gold that has ever come to any country within the same length of time in the world's history. The four months, August to November, 1914, witnessed a net exportation of gold of 85.7 millions chiefly in response to Europe's demands upon us for the liquidation of our floating indebtedness to her. In December, however, the tide turned and from August 1, 1914, to April 1, 1917, our total net importation of gold amounted to \$1,109 millions. During this same period, namely, approximately the period of the war before our entrance as a belligerent, our merchandise exports exceeded our merchandise imports by \$6,054 millions—an average of \$189.3 millions a month, as compared with an average of \$46.5 millions a month for the fiscal years 1912, 1913 and 1914.

After our entrance into the war, and until the armistice, the change in our supply of monetary gold was negligible. From April 1, 1917, to November 1, 1918, our net importation of gold amounted to only 11.5 millions. During this period we raised still higher our excess merchandise exports, bringing them to \$4,850 millions, or an average of \$255 millions a month for the nineteen months we were a belligerent. We received, however, most of the compensation that was due us for this excess, in the form of securities, practically none in the form of gold.

The huge supplies of gold that we received during the first thirty-two months of the war were dammed up in the country by the gold embargo which the government maintained from September 7, 1917, to June 10, 1919. During the approximate period of the embargo the total authorized exports of gold were \$111.6 millions, but, as we have already seen, the gold exports were almost entirely offset by the gold imports of the same period. For approximately the period since the armistice, namely, from November 1, 1918, to March 10, 1920, we have had a net exportation of gold of 387 millions. Our stock of monetary gold decreased from \$3,080 millions on November 1, 1918, to \$2,721 millions on March 1, 1920.

One important war cause of inflation, therefore, was an increased supply of monetary gold in the United States throughout the whole period of our belligerency amounting approximately to \$1,100 millions, an amount equivalent to 58 per cent of our entire stock of monetary gold at the outbreak of the war.

A second war cause of inflation consisted in the reduction in legal reserve requirements of member banks made through the amendments of August 15, 1914, and June 21, 1917, to the federal reserve act. As a result of these amendments legal reserves against demand deposits were reduced for central reserve city banks from 18 per cent to 13 per cent, for reserve city banks from 15 per cent to 10 per cent, and for country banks from 12 per cent to 7 per cent. Furthermore, all legal requirements for reserves in vaults of the member banks were discontinued, thus making deposits in the federal reserve banks the only legal reserve. For time deposits the legal reserve requirement for all banks was reduced from 5 per cent to 3 per cent. Provision was also made whereby gold held by federal reserve banks as collateral against issues of federal reserve notes should be counted also as part of the gold reserve against these notes—a provision concerning which the federal reserve board said in its fourth annual report: "The effective gold holdings of the federal reserve banks have thus been greatly augmented and their discount power commensurately increased. . . ."¹

Referring to the table on page 4 and making the same computation for ultimate legal cash reserves under these new re-

¹ Page 11.

quirements that we made for them under the previous requirements, we arrive at the following results: For the central reserve city bank the ultimate legal cash reserve required was reduced from \$156,755, representing 10.5 per cent of deposits, to \$62,750, representing 4.18 per cent of deposits; for the reserve city bank the reduction was from \$132,400, representing 8.8 per cent of deposits, to \$50,150, representing 3.34 per cent; for the country bank the reduction was from \$108,018, representing 7.2 per cent of deposits, to \$37,550, representing 2½ per cent; for all three banks combined the reduction was from \$397,173, representing 8.8 per cent of deposits, to \$150,450, representing 3.34 per cent.

This was a large reduction in ultimate legal reserve requirements coming as it did less than four years after the great reduction authorized in the original federal reserve act. For the three banks combined the new requirements average only slightly more than one-fifth of the requirements prior to the federal reserve act, and they average less than two-fifths of what they ultimately would have been under the act as originally passed. These reductions were made under war conditions and the public has never fully realized their importance. Whether justified or not by the war emergency—and personally I believe they were excessive—they were a great factor in the progress of inflation.

Rapidly thereafter the ultimate cash reserves declined in the direction of these new legal minima, and they are still tending in that direction. From 1913 to 1919 the average ultimate cash reserve against deposits in our commercial banks (exclusive of bankers' balances) declined as follows: ¹ 1913, 11.7; 1914, 11.7; 1915, 11.9; 1916, 10.7; 1917, 10.6; 1918, 7.0; 1919, 6.6. A rough idea of the potentialities for expansion that this reduction involved may be obtained by applying these figures to the amount of net deposits in national banks as of the approximate date of the passage of the second amendment, namely, June 21, 1917.

On June 20, 1917, the net deposits against which a reserve is required, for the banks of the three central reserve cities were \$2,825 millions; a reduction of average ultimate legal reserve

¹ See Kemmerer, "Inflation," *American Economic Review*, June, 1918, pp. 253-256.

on this sum from 10.5 per cent to 4.18 per cent would release \$178.5 millions of reserve money, which at the 4.18 per cent reserve ratio would be sufficient for a deposit expansion of \$4,270 millions.

On the same date the corresponding net deposits of reserve city banks were \$2,956 millions. On this sum a reduction of average ultimate legal reserve from 8.8 per cent to 3.34 per cent would release \$161.5 millions of reserve money, which at a 3.34 per cent reserve ratio would be sufficient for a deposit expansion of \$4,835 millions. For country banks on June 20, 1917, the net deposits amounted to \$4,302 millions. On this sum a reduction of average ultimate legal reserve from 7.2 per cent to 2.5 per cent would release \$202.2 millions of reserve money, which at the 2.5 per cent reserve ratio would be sufficient for a deposit expansion of \$8,090 millions. For all three classes of national banks combined the amount of reserve money released would therefore be \$542.2 millions and the potential deposit expansion thereby created, assuming the existence of the gold embargo, would be \$17,196 millions.

The fact that similar reductions also applied to numerous state banks and trust companies, which were members of the federal reserve system and which computed their legal reserves on the same or essentially the same bases as the national banks, would greatly increase these figures.

Of course the fact that all banks need some till-money, even though that money cannot be counted as legal reserve, prevents ultimate reserves from reaching the legal reserve minima unless through action of the Federal Reserve Board, the normal legal reserve minima are reduced to meet emergency demands. To a large and increasing degree, however, till money itself is being made up of federal reserve notes which themselves carry a legal reserve of only 40 per cent.

A third war cause of inflation is found in the slackening rate of increase in physical production caused by the war. At such a time production of many kinds of goods is interrupted, economic energies are diverted into new channels involving much waste and lost motion in the readjusting process, millions of men are called from economic pursuits into military and naval service, and the products of industry are destroyed on a tremendous scale. Despite much overtime work, an increas-

ing employment of women and children, the speeding-up of economic activity and the increasing standardization of products, we cannot expect during such a period of storm and stress very much of an increase in the sum total of physical products thrown on the market for purchase and sale.

From 1896 to 1913 we have estimated the increase in the country's physical volume of business to have been roughly about 117 per cent, or approximately 7 per cent a year. Index numbers I have computed for the physical volume of business for the years 1913 to 1919 are as follows: ¹ 1913, 100; 1914, 99; 1915, 104; 1916, 109; 1917, 112; 1918, 113; 1919, 109.6.

This gives an average rate of increase from 1913 to 1919 inclusive of only 1.6 per cent.

In this connection it should be noted that during the war the course of products from producer to consumer was often shorter and more direct than it would be in normal times. With a price level unchanged, a given physical volume of business could probably have been carried on under war conditions prevailing in the United States during 1917 and 1918 with a smaller amount of money and circulating credit than in normal times, because the shifting of production to government account shortened greatly the average distance from producer to consumer, and lessened the average amount of exchange or money work required to place a given amount of goods in the hands of the final consumer. On this subject Professor G. O. Virtue said in a recent article: ²

The effect of this large scale purchase by the government, often in the early stages of production, and its method of dispensing them without further use of money, by decreasing the rapidity of circulation of great quantities of goods, must have affected the price level in the same way as would a reduction in the amount of goods, or a sudden resort to barter on a large scale, or to a more direct mode of marketing.

The war causes just described created vast potentialities of currency and deposit credit expansion. It was to the financial

¹ For a description of the method of computing these index numbers, see Kemmerer, "Inflation," *American Economic Review*, June, 1918, p. 248, footnote 1; also, Kemmerer, "Inflation," *The Bankers Statistics Corporation Service*, December 4, 1919, p. 1.

² "Another Reason why War Prices are High," *Quarterly Journal of Economics*, August, 1919, pp. 729-733.

interest of the government, the business public, and the banker to turn these potentialities into actualities by taking advantage of the powers of expansion thus created. One of the most important factors in this process was the government's war policy of depending extensively on loans for financing the war and of floating these loans in vast quantities at rates of interest much below market rates by means of appeals to war patriotism chiefly through great loan drives, during which the public were encouraged to borrow of the banks and to buy bonds to the limit of their borrowing capacity.

Buyers of Liberty Bonds could usually borrow of their local banks the money necessary for purchasing the bonds at the same rates of interest that were paid by the bonds, depositing the bonds as collateral for their loans. Inasmuch as small margins—in some cases practically none at all—were required by banks on these loans, the interest received on the bonds practically paid the interest due the banks on the purchaser's note. The fact that the funds paid to the bank for the government's account on such bond sales were usually left as a government deposit at the bank for several weeks at the low interest rate of 2 per cent, without the requirement of any reserve against the deposit, usually made the operation a profitable one to the bank. When later the government called upon the banks for the funds the federal reserve bank was ready to lend to the banks the funds necessary for meeting the government's call, and to do so at a rate of interest lower than that being paid to the bank by their bond-buying customers, accepting as collateral at par the customers' notes with the bonds attached as collateral or rediscounting those notes. This procedure lodged the bonds with the federal reserve banks releasing against them federal reserve bank deposits or federal reserve notes, the latter being obligations of the government—a process which expanded the federal reserve bank's liabilities, both deposit and note, and tended to force continually downward the federal reserve bank's percentage of reserve.

If the buyer of the Liberty Bond did not forthwith curtail his expenditure on other things—and reduce his loan at the bank—and in all too many cases he did not—the ultimate result of this series of operations was inflation and practically nothing more. The borrower went on consuming goods as be-

fore, competing with the government for the country's limited supply of labor and capital; the local bank went on lending as before because its loan to the Liberty Bond buyer had not appreciably curtailed its loanable funds; the government had more funds than before but there were no more goods thereby created or made available by the bond buyer's economies for the government's war needs. The federal reserve bank, however, had expanded its liabilities and reduced its ratio of reserves to deposits and outstanding federal reserve notes. Under the pressure of the increased purchasing power in the forms of circulating bank deposits and federal reserve notes thus thrown on the market to be used in competition for the pre-existing supply of goods, the price level was rapidly forced upward.

During the entire period of our participation in the war and during most of the time that has elapsed since the armistice, discount rates at the twelve federal reserve banks have been maintained below the market rate for like paper.¹ "The market has been in the Federal Reserve Bank." For most of the time the federal reserve banks offered preferentially low rates for loans collateralized by war paper. Patriotism and pressure from Washington led the banks to make heavy purchases of certificates of indebtedness for their own account. The result has been that both the member banks and the federal reserve banks have been loaded up with war paper, at times carrying upwards of seven billions of dollars of the government's debt.

Our heavy net exportations of goods to Europe during the war resulted in large receipts of European securities. These securities in substantial quantities were hypothecated at our banks and served as a basis for further currency and credit expansion.

It was some time before the potentialities for credit expansion which were being created in the manner above described made themselves felt in a rising price level. There was no appreciable increase in general prices from the outbreak of the war until the fall of 1916. From that time until the armistice the general tendency of the price level was strongly

¹ See E. W. Kemmerer, "Rediscounting and the Federal Reserve Discount Rate," *Journal of the American Bankers Association*, April, 1920, pp. 582-584.

upward. There was a slight reaction at the time of the armistice but since February, 1919, the upward movement has again been pronounced and is continuing to this day. At the present time our price level, as measured by the Bureau of Labor Statistics Index Numbers, is approximately 150 per cent higher than it was in July, 1914, or in the fall of 1915. There is always a lag between the time of currency and credit expansion and the rise in the price level—a lag which is largely responsible for the scarcity of goods of nearly every kind *at current prices*. A study of this lag is one of the most interesting statistical problems now before economists.

The conclusions of this paper may be summarized briefly as follows: There have been two groups of causes for the inflation we have experienced—non-war causes and war causes. The chief non-war causes were the large gold production that preceded the war and continued during its early years, and the changes in our currency and banking system that would have resulted from the carrying out of the provisions of the federal reserve act as originally enacted. Among these changes the principal ones making for inflation were the reduction of reserve requirements for member banks, the introduction of the federal reserve note, and the organization and development of the federal reserve clearing and collection system, including the gold settlement fund. These currency and banking changes that would have taken place under the federal reserve act as originally enacted, even had there been no war, would have resulted in considerable inflation, but the effects of this inflation on the price level would have been felt more slowly and nothing like to the same extent, partly because they would not have been speeded up by war pressure and partly because the supply of gold released by these improvements in our American currency and banking system would have been spread out thinly over the entire gold-standard world, instead of being dammed up in this country.

The chief war causes of inflation were the heavy net importations of gold into this country resulting from Europe's unprecedented demands upon us for war supplies, the gold embargo, the great war-time reductions made in legal reserve requirements of our national banks and of many other member banks, the extensive resort by the government to loans for

financing the war, particularly loans at artificially low rates of interest that were floated largely by the aid of very low discount rates at the federal reserve banks for war paper, and by the aid of undue encouragement of the public to borrow and buy. This policy placed vast sums in the hands of the government but did not increase the physical supply of goods which the government was so urgently needing. It, however, gave the government an advantageous position in the competition for goods that were being produced, because it gave the government almost unlimited funds and by forcing up prices at a rapid rate compelled rigid economies on the part of that large proportion of the public whose incomes either remained practically constant or increased much less rapidly than did the cost of living. This released labor and capital for the production of war supplies, but it placed the economic burden of the war very unequally and very inequitably. The slackening of the usual rate of increase of physical production because of war-time readjustments and because of the depletion of our labor force, the more direct routing from producer to consumer of the goods produced, the wholesale destruction of the products of industry, and the speeding-up of the rates of monetary and deposit currency turnover, all contributed their part to the war-time inflation.

We won our independence nearly a century and a half ago in a war financed predominantly by paper money inflation, we maintained the Union a half a century ago by a war financed extensively by paper money inflation, we have just preserved our political heritage by a war financed in the United States largely by deposit currency inflation, and yet we nearly all condemn inflation as a most inequitable method of financing a war. The great difficulty has been and, I fear, will continue to be, that financing a war by inflation, with all its injustice and with its necessary aftermath of economic and social problems, is none the less both politically and economically, during the war itself, the line of least resistance.